



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,967	09/23/2003	Thomas Jelonck	15818-2US JA/AD/mb	7891
20988	7590	02/09/2005	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			ORTIZ RODRIGUEZ, CARLOS R	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/667,967

Applicant(s)

JELONEK ET AL.

Examiner

Carlos Ortiz-Rodriguez

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-20, 23-26, 28-38, 42, 47, 51 and 55 is/are rejected.
- 7) ☒ Claim(s) 15, 21, 22, 27, 39-41, 43-46, 48-50, 52-54 and 56-65 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/5/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 15, 21, 22, 27, 39, 40, 41, 43-46, 48-50, 52, 53, 54, and 56-65 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-14, 16-20, 23, 24-26, 28-38, 42, 47, 51, and 55 rejected under 35 U.S.C. 102(e) as being anticipated by Lehmann et al. U.S Patent No. 6,786,726.

Art Unit: 2125

Regarding claims 1, 6, 7, 11-14, 16-20, 23, 24, and 29-33 Lehmann et al. discloses a method to model dental restorations, said method comprising: (a) compiling a database of materials for use in preparing a dental restoration; (b) compiling a database of procedures for preparing said dental restoration (C3 L55-63); (c) determining the geometrical constraints of said dental restoration (C3 L64-67); (d) determining the aesthetic constraints of said dental restoration (C4 L13-16); and (e) inputting said geometrical constraints and said aesthetic constraints to a computer to mathematically select from said material database and said procedure database a recipe for producing said dental restoration (C4 L22-58 and C11 L60-67).

Regarding claim 2 Lehmann et al. discloses a method wherein said dental restoration comprises a dental prosthesis (C3 L60-63).

Regarding claim 3 Lehmann et al. discloses a method wherein said dental prosthesis is selected from the group consisting of a crown, a multiple-element prosthesis such as a bridge, a veneer, an inlay or an onlay (C3 L60-63).

Regarding claim 4 Lehmann et al. discloses a method wherein said material database comprises material selections for use in one or more of a substructure, dentin, enamel, masks or stains (C5 L50-53).

Regarding claim 5 Lehmann et al. discloses a method wherein said procedure database comprises one or more of a milling, plasma fusion, rapid-prototyping, layering and fusion of

Art Unit: 2125

porcelain, polymerization of resins or composites (C4 L41-50).

Regarding claims 8, 9, 10, 26 Lehmann et al. discloses a method wherein said aesthetic constraints are obtained from light reflection measurements (C7 L1-20 and C24 L34-41).

Regarding claim 25 Lehmann et al. discloses a method further comprising (f) emulating said selected dental procedure with said selected material on said computer to image process the most likely outcome of the dental restoration (C4 L59-67).

Regarding claim 28 Lehmann et al. discloses a method further comprising comparing said predicted dental restoration image with the dental restoration to determine differences in morphology and/or symmetry (C7 L1-19).

Regarding claims 34, 51, 55 Lehmann et al. discloses a method for producing an aesthetic prosthesis, said method comprising: (a) acquiring quantitative data on shape and appearance (C4 L59-63) (b) processing said quantitative data to determine the desired result (C4 L64-65); (c) further processing said quantitative data and the desired result to determine a method for achieving said desired result (C4 L64-65), (d) manufacturing the underlying structure of said prosthesis; and (e) finalizing said prosthetic work (C4 L23-58).

Regarding claims 35-38 Lehmann et al. discloses a method wherein said shape quantitative data comprises the digital measurement of teeth (C103 L55-60).

Regarding claims 42 and 47 Lehmann et al. discloses a method wherein said shape and aesthetic quantitative data are processed using computer aided design tool to determine the shape and appearance for said prosthesis (C4 L23-40).

#### ***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following publication is cited to further show the state of the art with respect to methods for dental restoration:

- a. Pierre et al., "Esthetic Option for the Implant-Supported Single-Tooth Restoration- Treatment Sequence With a Ceramic Abutment", Journal of the Canadian Dental Association, October 2001, Vol. 67 No. 9.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (571) 272-3747. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2125

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

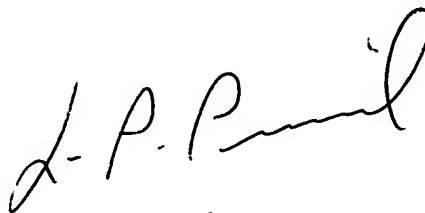
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carlos Ortiz-Rodriguez  
Patent Examiner  
Art Unit 2125

cror

February 5, 2005

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

**LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**